REMARKS

Reconsideration and withdrawal of the restriction requirement is respectfully requested in view of the remarks presented herewith.

The Office Action has required restriction from among the following Groups:

I. Claims 2-7, 24, and 27 in total, and claims 1, 23, and 26 in part, drawn to the GCR1 (Fragilis) polypeptide, classified in class 530, subclass 350.

II. Claims 11-13, 18, and 21 in total, and claims 8-10, 17, and 20 in part, drawn to the GCR1 (Fragilis) nucleic acid, classified in class 536, subclass 23.5.

III. Claims 35 in part, and 36, drawn to antibodies specific for GCR1 (Fragilis) polypeptide, classified in class 530, subclass 387.1.

IV. Claims 29-34, 37, and 41-43, each in part, drawn to methods of identifying pluripotent cells comprising detecting presence of a GCR1 (Fragilis) polypeptide, classified in class 435, subclass 7.21.

V. Claims 38 and 39, drawn to a pluripotent cell identified by detecting presence of a GCR1 (Fragilis) polypeptide or a GCR2 (Stella) polypeptide, classified in class 435, subclass 325.

VI. Claims 25 and 28 in total, and claims 1, 23, and 26 in part, drawn to the GCR2 (Stella) polypeptide, classified in class 530, subclass 350.

VII. Claims 14-26, 19, and 22 in total, and claims 8-10, 17, and 20 in part, drawn to the GCR2 (Stella) nucleic acid, classified in class 536, subclass 23.5.

VIII. Claim 35 in part, drawn to antibodies specific for GCR2 (Stella) polypeptide, classified in class 530, subclass 387.1

IX. Claims 29-34, 37, and 41-43, each in part, drawn to methods of identifying pluripotent cells comprising detecting presence of a GCR2 (Stella) polypeptide, classified in class 435, subclass 7.21.

X. Claims 40, 44, and 45, drawn to a method of isolating a gene specifically expressed in a pluripotent cell, classified in class 435, subclass 91.1.

Applicants hereby elect Group I, with traverse, for prosecution on the merits.

Groups I-IV are allegedly unrelated to Groups VI-IX. The Office Action contends that the different groups of inventions each recite or utilize distinct polypeptides that are not related

to one another structurally or functionally, their only relationship being that they are expressed in the same cell. The polypeptides of Groups I and VI, their respective encoding nucleic acids of Group II and VII, antibodies (Groups III and VIII), and methods of use (Groups IV and IX) allegedly would each require a separate consideration of utility, enablement, and prior art.

Groups I-IX and X are allegedly unrelated, because Group X is a method of gene discovery that does not rely upon, utilize, or recite any of the products or methods of groups I-IX.

Groups I, II, III, and V are allegedly independent and distinct, each from each other, because they are products that possess characteristic differences in structure and function, and further, each has an independent utility that is distinct for each invention.

The Office Action alleges that although the nucleic acids of Group II encode the polypeptides of Group I, Groups I and II are distinct because they are physically and functionally distinct chemical entities and the protein product can be made by another, materially different process, such as by synthetic peptide synthesis or purification from the natural source. Further, the Office Action states that the nucleic acid can be used for processes other than the production of the polypeptide, such as in hybridization assays.

The Office Action further alleges that the polypeptide of Group I and the antibody of Group III are patentably distinct because the polypeptide of Group I is a single chain molecule, whereas the polypeptide of Group III encompasses antibodies including IgG, which comprises 2 heavy and 2 light chains. Thus, according to the Office Action, the polypeptide of Group I and the antibody of Group III are structurally distinct.

The polynucleotide of Group II and the antibody of Group III are allegedly patentably distinct because any relationship between a polynucleotide and polypeptide is dependent upon the information provided by the nucleic acid sequence open reading frame as it corresponds to the primary amino acid sequence of the encoded polypeptide. The Office Action contends that a polynucleotide of Group II will not encode an antibody of Group III, and an antibody of Group III cannot be encoded by a polynucleotide of Group II. Therefore, the Groups encompassing the antibody and the polynucleotide are patentably distinct, according to the Office Action.

The Office Action also states that Group V, drawn to a pluripotent cell, is structurally and functionally distinct from the products of Groups I, II, and III.

The polypeptides of Group VI, the nucleic acids of Group VII, the antibodies of Group VIII, and the cells of Group V are allegedly independent and distinct, each from each other, for reasons disclosed in the Office Action.

Groups I-III, V, and IV are allegedly related as product and process of use. The Office Action states that each of the products of Groups I-III or V could be used in processes other than the cell identification process of Group IV. Pluripotent cells can be identified by means or methods that do not utilize the products of Groups I-III or V.

Groups V-VIII and IX are allegedly related as product and process of use, and are distinct because each of the products of Groups V-VIII can be used in processes other than the cell identification process of Group IX. The Office Action further alleges that pluripotent cells can be identified by means that do not utilize the products of Groups V-VIII.

The MPEP lists two criteria for restriction to be proper. First, the invention must be independent or distinct. MPEP §803. Second, searching the additional invention(s) must constitute an undue burden on the Examiner if restriction is not required. *Id.* The MPEP directs the Examiner to search and examine an entire application "[i]f the search and examination of an entire application can be made without serious burden...even though it includes claims to distinct or independent inventions." *Id.*

The Office Action alleges that "because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, recognized divergent subject matter, and that the search for one invention is not required for the search of another, restriction for examination purposes as indicated is proper". However, a number of the groups have been classified under common search classes, which contradicts the above statement. Therefore, it is respectfully submitted that at least a subset of the groups that are commonly classified should be subject to rejoinder.

For example, Groups I, III, VI, and VIII have all been classified under class 530. Groups I and VI are further classified under subclass 350, and Groups III and VIII are further classified under subclass 387.1. As another example, Groups IV, V, IX, and X have all been classified under class 435. Groups IV and IX were further classified under subclass 7.21. Additionally, Groups II and VII are commonly classified under class 536, subclass 23.5. The fact that these selected Groups fall under the same search classification indicates that it would not be an undue burden on the Examiner to search and examine the subject matter of the present invention.

The claims, as originally filed and presented herein, represent a web of knowledge and continuity of effort that merits examination as a single invention. Additionally, a search of the commonly classified Groups is necessarily believed to be coextensive, as searches of the subject matter of Groups I, III, VI, and VIII; Groups IV, V, IX, and X; and Groups II and VII would consequently and inextricably encompass a search of the claims included in each Group that encompasses a common classification.

Accordingly, as Applicants have elected the claims of Group I, with traverse, Applicants request that Group I be rejoined with those Groups similarly classified, such that the claims of Groups I, III, VI, and VIII are searched and examined together.

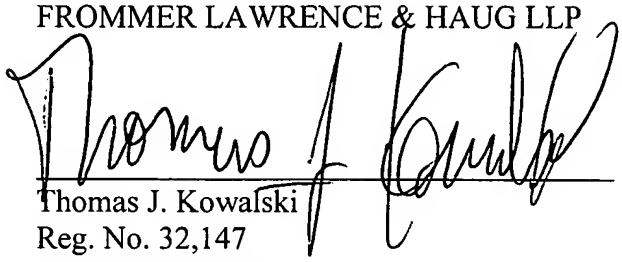
In view of the remarks herein, enforcing the present restriction requirement would result in inefficiencies and unnecessary expenditures by the Applicants and the PTO, as well as extreme prejudice to Applicants (particularly in view of GATT, whereby a shortened patent term may result in any divisional applications filed). Restriction has not been shown to be proper, especially in view of the requisite showing that a serious burden has not been met. Indeed, the search and examination of each commonly classified Group would likely be co-extensive and, in any event, would involve such interrelated art that search and examination of the entire application can be made without undue burden on the Examiner. All of the preceding, therefore, mitigate against restriction.

In view of the foregoing, Applicants respectfully request reconsideration and withdrawal, or at least modification, of the restriction requirement, such that, at the least, the claims of Groups III, VI, and VIII are searched and examined with the claims of Group I.

CONCLUSION

Reconsideration and withdrawal, or modification of the restriction requirement, and a prompt and favorable examination on the merits, is respectfully requested.

Respectfully submitted,
FROMMER LAWRENCE & HAUG LLP

By: 

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